

AMENDMENTS TO THE CALIMS

1. (Currently amended) An implantable surgical drain for draining fluid from a patient's body and sensing at least one physiological property of tissue by sensing energy that has been transmitted through and emitted from the tissue, comprising:

an elongated conduit, having an outer surface, configured to be implanted in a patient's body and to drain fluid from tissue of the body while the conduit is placed adjacent to the tissue;

a first optical fiber having a first optical fiber distal end, wherein the distal end branches away from the ~~conduit's outer surface~~ conduit and is configured for insertion in the tissue, inside the patient's body, wherein the optical fiber distal end is configured to deliver energy to the tissue, wherein the delivered energy passes through, and is emitted from, the tissue; and

a second optical fiber different than the first optical fiber having a second optical fiber distal end configured to receive the energy emitted from the tissue.

2. (Previously presented) The surgical drain of claim 1, wherein the first optical fiber distal end has an axis that is substantially parallel to the second optical fiber distal end.

3. (Original) The surgical drain of claim 1, wherein the second optical fiber distal end is configured for insertion in the tissue.

4. (Original) The surgical drain of claim 1, wherein the elongated conduit further comprises at least one housing extending from the conduit, wherein the housing supports the first optical fiber distal end for insertion into the tissue.

5. (Previously presented) The surgical drain of claim 1, wherein the energy received by the second optical fiber distal end has at least one characteristic indicative of at least one physiological property of the tissue.

6. (Previously presented) The surgical drain of claim 5, wherein the physiological property is selected from the group comprising: oxygenation, perfusion, pH, NADH levels, biochemical composition, or drug concentration.

7. (Previously presented) The surgical drain of claim 1, wherein the conduit includes a drain portion configured to rest against a substantial length of tissue within the body and a plurality of drain holes spaced along substantially the entire length of the drain portion.

8. (Previously presented) The surgical drain of claim 1, wherein at least the second optical fiber distal tip is embedded within the conduit.

9. (Original) The surgical drain of claim 1, further comprising a display configured to depict information corresponding to the energy received by the second optical fiber distal end.

10. (Cancelled).

11. (Cancelled).

12. (Currently amended) The surgical drain of claim 1, wherein the ~~first~~second optical fiber includes a component that is affixed to the conduit.

13. (Previously presented) The surgical drain of claim 12, wherein the component is embedded in the conduit.

14. (Previously presented) The surgical drain of claim 12, wherein the component includes a sensor.

15-19 (Cancelled).